



An Energy Efficiency Workshop & Exposition

Kansas City, Missouri



CONFESSIONS OF A RECOVERING BUREAUCRAT

Information (?)

HEIGHT	5.75 FEET
WEIGHT	205.00*POUNDS
EXPERIENCE	<u>32.83</u> YEARS
TOTAL	243.58

(Everything said is accurate and factual as possible
- it may not make sense - so ask questions.)

Definition of a Bureaucrat

- **One who works in an organization wrapped in rigid procedures, rules, checks and balances, and regulations so that it's hard to make mistakes - or get anything done.**
- **Once a bureaucrat always a bureaucrat**
- **It is a constant struggle against the subtle temptations of bureaucracy.**



Topics - Way of Looking at Things

- **Energy Waste as Resource**
- **Using Other Peoples' Money**
- **Dealing with Indecision Makers**
- **Doing It Right**
- **It's Never Really Over**
- **Technical Tips**
- **Support Your Local Champion**
- **You've Been Born into Interesting Times!**



Energy Waste is a Resource

- **Energy Efficiency is not our goal!**
- **If it was we could turn off the lights and go home.**
- **Providing secure, reliable energy to support our missions at the lowest possible cost is!**
- **Energy and water cost savings can be turned into cash to solve high priority problems at the facility level.**



Policy Makers

Be Careful Setting and Using Goals

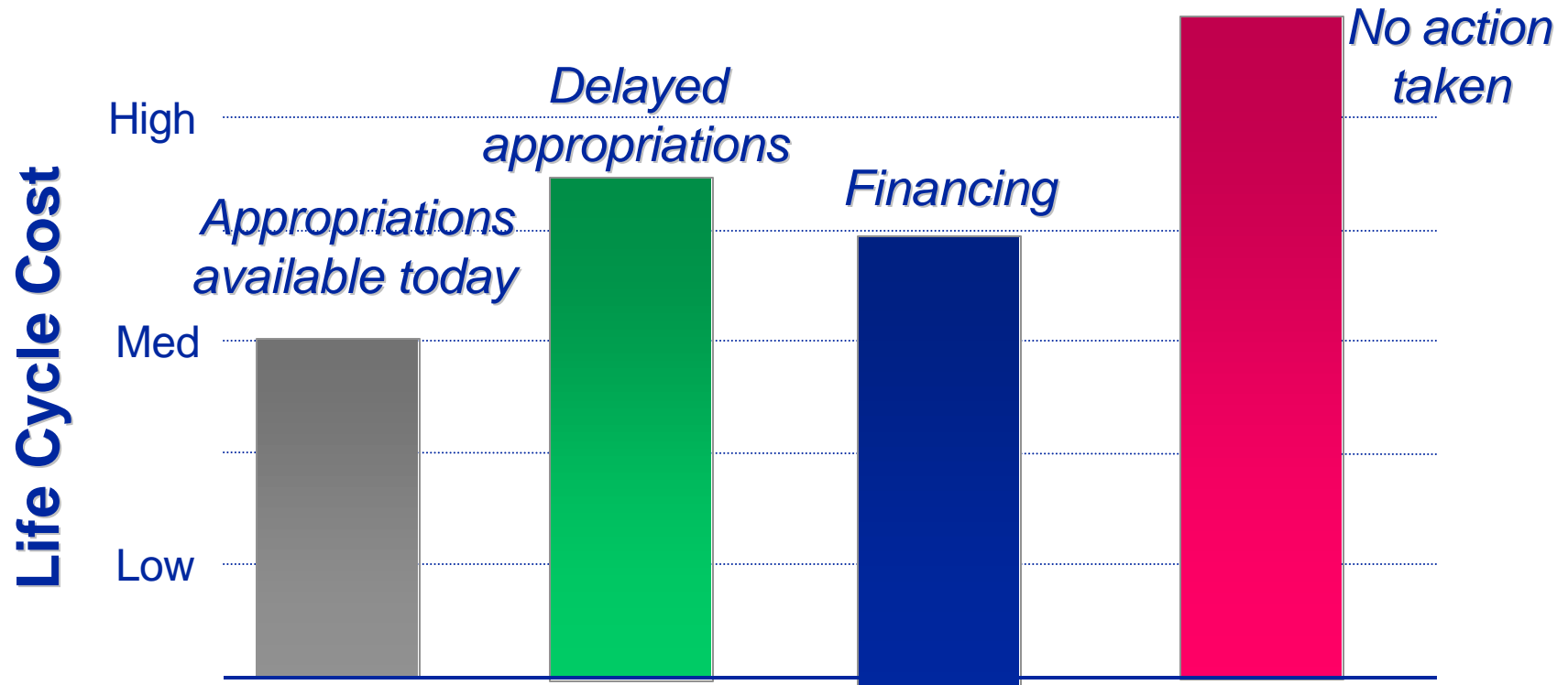
- **Goals are just a way to keep program management attention focused**
- **Make sure your goals provide the right incentives for action**
- **Unit Cost goals for example:**
Costs/units = efficiency measure?
- **Watch out for unit cost valves**



Using Other Peoples' Money

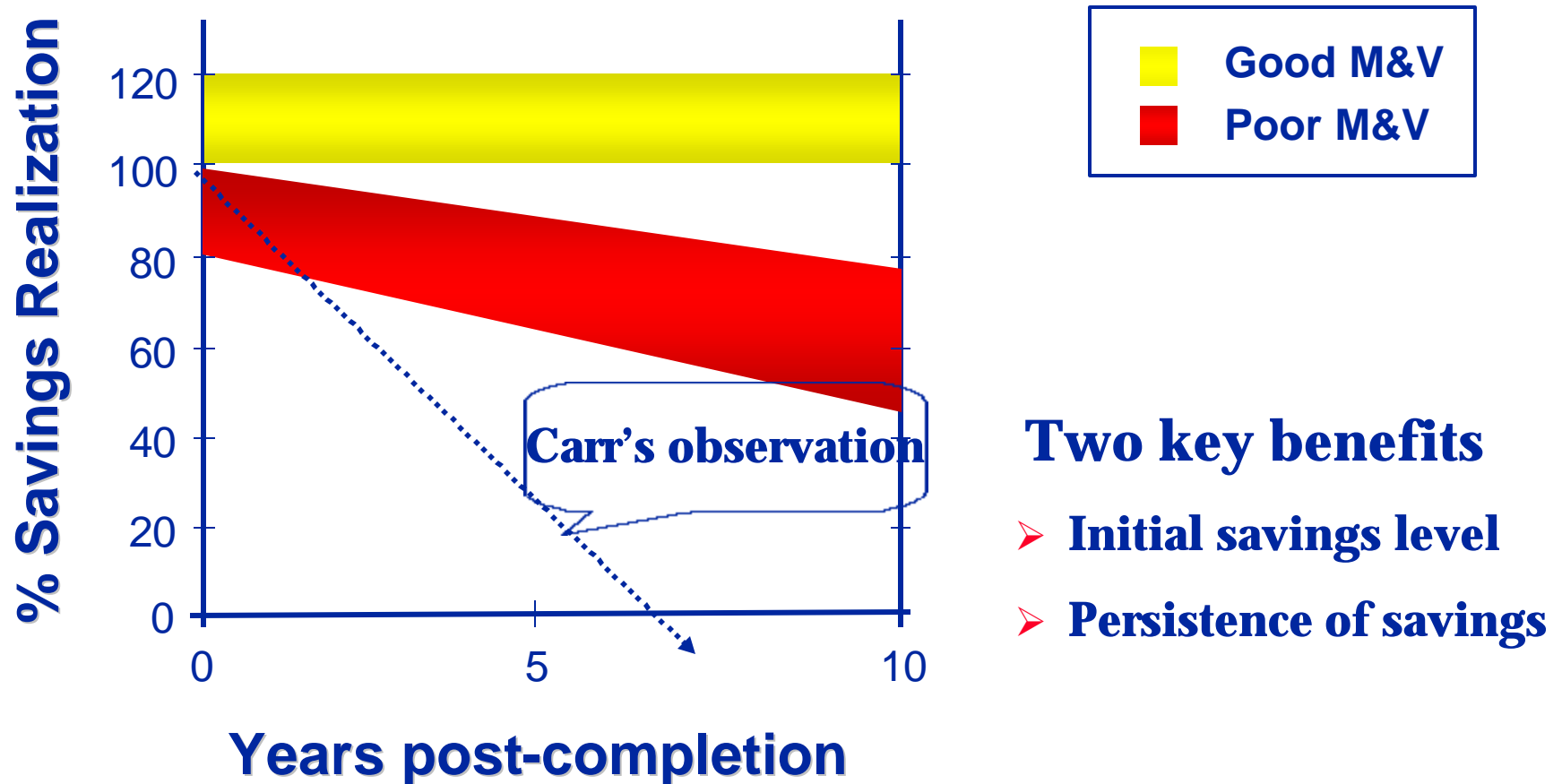
- **Alternative Financing is a new way of doing business**
- **Buy expertise, experience, continued savings, and action - not just things**
- **Contract for Performance**
- **Learn about financing and acquisition - you need to know what to do to make it successful**
- **The only bad action is inaction**

The Cost of Delaying a Project



**Any delay in project implementation
results in loss of life cycle savings**

Assured Continued Savings



Bosses, Bosses' Bosses, Congress, Political Appointees, Lawyers, Comptrollers, etc.

- **Keep it simple**
- **Talk in their language**
- **Make it easy - summarize, bullets, pros and cons**
- **Make it worth their while**
- **How it will make them happier or look good with no (or little) risk**



What Do They Really Want?

- **No interference with Primary Objectives**
- **Relief from Headaches**
- **No Mistakes, Risk of Embarrassment, or Jail Terms**
- **Greater Flexibility**
- **Extra Discretionary Funds**
- **To Get Reelected, or promoted, and Do Good** (see to get reelected, or promoted)
- **Improved Facilities**



Doing It Right or Doing It Over

- **Design - Bid - Build = Change Orders**
(Assumes “We” are smarter than “Them”)
- **Design/Build = Performance**
- **Partnering leads to “It’s OUR problem.”**
- **There has been real, positive experience**
- **Commissioning makes sure things work and keep working as they should**

<http://edesign.state.fl.us/fdi/edesign/resource/totalbcx/guidemod/guide01.html>

What is Partnering?

Client-Contractor development of -

- **Mutually beneficial objectives and goals**
- **Roles and responsibilities**
- **Potential barriers, problems, and opportunities**
- **Action plan and processes for problem resolution**
- **Commitment to communication and joint cooperation**

- **Lack of good operation and maintenance is the source of current energy waste**
- **Don't repeat that mistake!**
- **The TRUTH is Time Dependant**
Change is the only constant -
stay flexible and assume that things will
change - have a plan to act when they do.

The following technologies “didn’t work”

- **Air Source Heat Pumps**
- **Variable Air Volume Systems**
- **Energy Monitoring and Control Systems**
- **Solar Thermal Systems**

Why?

- **Lighting** - de-lamp vending machines, LED exit signs, occupancy sensors, CFLs, T8s (or 5s), day lighting, solar outdoor lighting, ...
- **HVAC** - O&M (clean/replace the darn filters, and heat exchangers) energy efficient motors, VSD/VFD, controls, thermal distribution insulation, GSHPs, solar wall, insulation, ...
- **Air Compressors**
- **Water** www.eren.doe.gov/femp/aboutfemp/waterguide.html
- **Renewables** - site specific PV and wind
- **High Use Processes**

- **www.eren.doe.gov/AB/**
- **www.nrel.gov/publications**
(e.g. 634 on wind, 7 in 2001, 65 in 2000)
- **www/pnl.gov/fta**
Federal Tech Alerts
- **AEE CEM Courses**
- **DOE Energy Training**

- **I think the statement “If you don’t measure it you can’t manage it” is dumb.**
- **But, metering - IF YOU USE IT - is an outstanding energy efficiency tool**
- **Metering as a diagnostic management tool requires expertise and commitment**
- **Remote metering and analysis is highly recommended - cost/benefit test**



Support Your Local Champion

- **If you are one, I'd like to buy you a beer.**
- **If you aren't one, adopt one -**
 - **Make it easier for them to get the job done**
 - **Give them resources and responsibility**
 - **Let them make a mistake or two**
 - **Reward them - e.g. training**



Should Energy Efficiency Be Illegal?

It feels so good when you do it - and it's habit forming:

- Provides improved facilities**
- Cures headaches**
- Improves health and productivity**
- Improves mission security and reliability**
- Creates jobs & National economic strength**
- Improves discretionary funding**
- Is the cheapest pollution prevention tool**



Congratulations - You've Been Born into Interesting Times!

- **In chaos there is opportunity**
- **Energy inefficiency is a good thing**
- **It can help solve lots of other problems**
- **Steal good ideas**
- **Share your good ideas**
- **Welcome change - 'cause it's coming**
- **Take advantage of your opportunities**
- **Don't forget the lessons of history**



Thoughts to Ponder

- **Don't' just save energy - solve problems**
- **Put potential energy savings in \$/week or month to keep the project rolling along**
- **Put the savings in terms of what the indecision makers want**
- **Focus on the important - if they want it green - OK**
- **Always make sure those that have to live with a policy or project give it the laugh test**
- **Periodically question the “givens”**
- **Avoiding making mistakes is a mistake**



More Thoughts to Ponder

- **Forgiveness is easier to get than permission**
- **Following the rules may not get the job done**
- **Getting the job done is no excuse for not following the rules (know the difference between rules and laws)**
- **Never ask a lawyer why you can't do something**
- **Always try to only get one thing wrong at a time**
- **When you travel pack a sense of humor**
- **The sooner you fall behind the more time you'll have to catch up**
- **Remember the 80/20 and 50/50/90 rules**
- **Never delay the end of a meeting - or a presentation**